

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,079	08/19/2003	Paul Neuman	1509-436	3057
220.7	590 04/02/200° CKARD COMPANY	EXAMINER		
P O BOX 272400	0, 3404 E. HARMON	DADA, BEEMNET W		
INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			ART UNIT	PAPER NUMBER
10111 00==111	.,	2135		
			ride plant	
SHORTENED STATUTORY	PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MONTHS 04/02/2007		04/02/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

		Applic	ation No.	Applicant(s)	,		
Office Action Summary		10/64	3,079	NEUMAN ET AL.			
		Exami	ner	Art Unit			
		Beemi	net W. Dada	2135			
The M Period for Reply	AILING DATE of this commu	nication appears on	the cover sheet w	ith the correspondence ac	ddress		
A SHORTEN WHICHEVER - Extensions of tir after SIX (6) MO - If NO period for - Failure to reply v Any reply receiv	ED STATUTORY PERIOD F R IS LONGER, FROM THE N me may be available under the provisions INTHS from the mailing date of this com- reply is specified above, the maximum s within the set or extended period for reply ed by the Office later than three months erm adjustment. See 37 CFR 1.704(b).	MAILING DATE OF s of 37 CFR 1.136(a). In n munication. tatutory period will apply a y will, by statute, cause the	THIS COMMUNI o event, however, may a nd will expire SIX (6) MOI application to become A	CATION. reply be timely filed NTHS from the mailing date of this of BANDONED (35 U.S.C. § 133).			
Status					•		
2a) ☐ This ac 3) ☐ Since the	nsive to communication(s) file tion is FINAL his application is in condition in accordance with the pract	2b)⊠ This action for allowance exc	is non-final. ept for formal mat	•	e merits is		
Disposition of Claims							
 4) Claim(s) 1-22 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-22 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. 							
Application Pap	ers						
10)∏ The dra Applicar Replace	ecification is objected to by the wing(s) filed on is/are not may not request that any objected the drawing sheet(s) including the or declaration is objected the solution is objected to be solved in the solution is objected t	: a) ☐ accepted o ection to the drawing g the correction is re	(s) be held in abeya quired if the drawing	nce. See 37 CFR 1.85(a). g(s) is objected to. See 37 C			
Priority under 35	5 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 							
2) Notice of Drafts3) Information Dis	rences Cited (PTO-892) sperson's Patent Drawing Review (sclosure Statement(s) (PTO/SB/08) ail Date <u>12/08/03</u> .	PTO-948)	Paper No	Summary (PTO-413) (s)/Mail Date Informal Patent Application	·		

Application/Control Number: 10/643,079

Art Unit: 2135

DETAILED ACTION

1. Claims 1-22 have been examined.

Claim Rejections - 35 USC § 112

- 2. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 3. Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 4. Claims 1 and 15 recite the limitation "the configuration" in line 2. There is insufficient antecedent basis for this limitation in the claim. Claims 2-14 depend from claim 1 and are rejected under the same rationale.
- 5. Claims 15, recites the limitation "being arranged to". The phrase renders the claim indefinite because it is unclear whether the limitation(s) following the phrase "being arranged to" are actually performed. Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 7. Claims 1-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Chaiken EP 1072975 A2.

- 8. As per claim 1, Chaiken teaches a data processing system comprising a processor (CPU 104 of figure 1), a non-volatile storage medium (i.e., ROM) including configuration data that describes the configuration of the non-volatile storage medium (BIOS stored on ROM memory 102) [column 3, lines 24-27], a controller for managing data exchanges with the non-volatile storage medium and for invoking an uninterruptible software routine (i.e., invoking system management interrupt (SMI), column 6, 0028) in response to first software attempting to access the configuration data (i.e., attempting to update the ROM BIOS and generating software SMI) [column 6, paragraphs 0026-0028]; the uninterruptible software routine having code for determining whether the first software is authorized to access the configuration data and for allowing or preventing any such access according to the determination [column 6, paragraphs 0029-0031].
- 9. As per claim 15, Chaiken teaches a system comprising a processor (CPU 104 of figure 1), a first non-volatile storage medium having first and second firmware (i.e., new Flash Image and software SMI handler, see figure 3, 300, 312, 318) and a second non-volatile storage (i.e., ROM) medium for storing configuration data that describes the configuration of the second non-volatile storage medium (BIOS stored on ROM memory 102 of figure 1 or ROM BIOS 314 of figure 3) [column 3, lines 24-27]; the processor having a first mode of operation (i.e., real mode) for executing the first firmware and a second mode of operation (i.e., SMI mode) for executing the second firmware [columns 3-4, paragraph 0016-0017 and column 7, paragraphs 0035-0036]; the processor being arranged to enter the second mode of operation and execute the second firmware in response to the first firmware, executing in the first mode of operation, at least attempting to access the configuration data (i.e., attempting to update the ROM BIOS and

Application/Control Number: 10/643,079

Art Unit: 2135

generating software SMI) [column 6, paragraphs 0026-0028 and column 7, paragraphs 0034-0036]; the second firmware being arranged to determine whether the first software is authorized to access the configuration data [column 6, paragraphs 0029-0031 and column 7, paragraphs 0036].

Page 4

- 10. As per claims 16, 21 and 22, Chaiken teaches a method of controlling a data processing system, the system comprising a processor (CPU 104 of figure 1), first non-volatile storage storing first software and an uninterruptible software routine for executing within respective modes of operation of the processor (i.e., new Flash Image and software SMI handler, see figure 3, 300, 312, 318), and a second non-volatile storage medium storing configuration data associated with the second non-volatile storage medium (BIOS stored on ROM memory 102 of figure 1 or ROM BIOS 314 of figure 3) [column 3, lines 24-27]; the first software having associated identification data (i.e., flash signature, column 6, lines 0028]; the method comprising the steps of: executing the uninterruptible software routine, in the second mode of operation of the processor, in response to the first software, executing within the first mode of operation of the processor, at least attempting to access the configuration data; i.e., attempting to update the ROM BIOS and generating software SMI) [column 6, paragraphs 0026-0028 and column 7, paragraphs 0034-0036]; determining whether the first software is authorized to access the configuration data and controlling access to the configuration data according to that determination [column 6, paragraphs 0029-0031 and column 7, paragraphs 0036].
- 11. As per claim 2, Chaiken further teaches the system in which the first software is initialization software for initializing the data processing system [column 3, paragraph 0014].

Art Unit: 2135

12. As per claims 3 and 4, Chaiken further teaches the system wherein the configuration data comprises at least a portion of first data included in a data structure of the non-volatile storage medium [column 3, paragraphs 0014 and 0016].

- 13. As per claims 5 and 6, Chaiken further teaches the system wherein the configuration data comprises executable code [column 3, paragraphs 0014 and 0016].
- 14. As per claims 7-11, Chaiken further teaches the system wherein at least one of the configuration data and data associated with the first software are encrypted and the controller includes a decrypter of at least one of the configuration data and data associated with the first software [columns 4-5, paragraphs 0020-0022].
- 15. As per claim 12, Chaiken further teaches the system wherein the interrupt includes an SMI interrupt and the uninterruptible software routine includes a system management mode code executable within a constrained or protected operating environment [column 6, paragraphs 0026-0028].
- 16. As per claim 13, Chaiken further teaches the system further including an operating system loader for loading an operating system for the data processing system and wherein the configuration data is arranged to provide access to the operating system loader to load the operating system for the data processing system from the non-volatile storage medium [figure 3].

Art Unit: 2135

17. As per claim 14, Chaiken further teaches the system wherein the first software is at least one of an operating system of application [figure 3].

- 18. As per claims 17 and 18, Chaiken further teaches the system wherein the uninterruptible software routine includes accessing to authorization data and the step of determining comprises the steps of: comparing the identification data associated with the first software with the authorization data to determine whether or not they match, and authorizing access or otherwise to the configuration data according to the comparison [column 6, paragraphs 0029-0031 and column 7, paragraphs 0036].
- 19. As per claims 19 and 20 Chaiken further teaches the system further comprising the steps of subjecting at least the configuration data to a configuration data algorithm to produce second configuration data [column 6, paragraphs 0029-0031 and column 7, paragraphs 0036].

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO Form 892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Beemnet W. Dada whose telephone number is (571) 272-3847. The examiner can normally be reached on Monday - Friday (9:00 am - 5:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y. Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/643,079

Art Unit: 2135

Page 7

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Beemnet W Dada

March 21, 2007

/ HOSUK SONG PRIMARY EXAMINER